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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,365	03/22/2001	Teiji Yamamoto	010417	2367

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EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,365

Applicant(s)

YAMAMOTO ET AL.

Examiner

Alison K. Pickard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 12 August 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Baylor (4,426,091).

Baylor discloses a seal assembly comprising a pair of seal rings comprising lip portions 52, 54 that protrude in opposite axial directions, a load seal ring 42 compressed and inserted between the seal rings and exerting reaction forces on the lips, and an inner diameter controller body 44 in contact with the load ring. The seal ring has a groove 58 (or 106) tolerates axial compression.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baylor in view of Peguet (2,877,029).

Baylor does not disclose an outer-diameter controller body. Peguet teaches a sealing assembly comprising first and second seal rings each having a lip, a load ring, and an inner

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diameter body. Peguet teaches that the sealing assembly can be mounted in two ways (see Fig. 2 and 3). Peguet teaches using casing 7/4 and an outer body 6 to mount the sealing assembly on a shaft so that the lips remain in sealing contact. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the seal of Baylor by using the casing and outer body 6 taught by Peguet so that the seal assembly can be mounted in a variety of environments as a unitary structure while maintaining an effective seal.

5. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taft (5,183,318) in view of Baylor (4,426,091).

Taft discloses a crawler-track connection comprising a pin 41 inserted through links 16, bushings 54 and 50, and a seal assembly (e.g. 60) disposed between radial walls of the two bushings. Taft does not disclose the seal assembly comprises a load ring disposed between and exerting pressure on first and second seal rings each comprising lip portions. Baylor teaches an improved sealing assembly for crawler-track connections. Baylor teaches a sealing assembly comprising a pair of seal rings comprising lip portions 52, 54 that protrude in opposite axial directions, a load seal ring 42 compressed and inserted between the seal rings and exerting reaction forces on the lips, and an inner diameter controller body 44 in contact with the load ring. Baylor teaches using the two lips and load ring to ensure sealing contact against both surfaces (of the bushings) while accommodating axial compressions. The ring body 44 offers rigidity and limits displacement of the seal assembly. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the connection of Taft by using the seal assembly taught by Baylor to ensure improved sealing engagement while allowing displacement of pieces of the connection.

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6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taft in view of Baylor as applied to claims 7 to 9 above, and further in view of Johnson.

Neither Taft nor Baylor discloses a dust seal ring on an outer peripheral side of the seal assembly. Johnson teaches a dust seal 114 on an outer side of a seal assembly to minimize the seal's exposure to abrasive material. It would have been obvious for one of ordinary skill in the art at the time the invention was made to use the dust seal of Johnson to protect the seal assembly from dust and abrasive material, creating a more effective and longer lasting sealing assembly.

Allowable Subject Matter

7. Claim 4 is allowed (note: claims 5 and 6 are allowed if amended to depend only from claim 4).

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show nor suggest the combination of limitations required by the claims. The prior art does not disclose a pair of seal rings each having lip portions disposed and protruding in opposite directions, and a load ring compressed and inserted between the seal rings, wherein one of the rings has an outer-diameter body and the other has an inner diameter body. Danner lacks the load seal ring. Baylor in view of Peguet (or Nakaishi in view of DE '247 (Harms or Maguire)) does not create an outer body on one of the rings and an inner body on the other of the rings. And, there does not appear to be motivation, absent Applicants' own disclosure, to modify the prior art in the manner required by the claims.

Response to Arguments

9. Applicant's arguments filed 6-16-03 have been fully considered but they are not persuasive and are moot in view of the new ground(s) of rejection.

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The prior art discloses sealing assemblies in a crawler-track connection (see examples Taft and Boggs). The prior art discloses sealing assemblies comprising lips, load rings, and inner controller bodies (see at least Baylor). The prior art teaches an outer controller body (Peguet) used with this kind of sealing assembly.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882.

The examiner can normally be reached on M-F (9-6:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.


Alison K. Pickard
Examiner
Art Unit 3676

AP